

## **Chemical Criteria Review Technical Advisory Committee Meeting Notes**

January 12, 2007

DNR Field Office #5  
401 SW 7<sup>th</sup> St., Suite I  
Des Moines, IA 50309

9:30 AM – 3:30 PM

### **I. Welcome (Logistics, Introductions) – Lori McDaniel**

- Attendees: Dusan Palic, Dr. Robert Baumann, Jay Brady, Mike Coffey, Susan Heathcote, John Miller, Connie Dou, Adam Schnieders, Ann Lavaty, Greg Sindt, Maryann Ryan, John Olson, Lori McDaniel

### **II. Overview of background information – Lori McDaniel**

- Background information was provided on the history of the most recent Water Quality Standards Rule Package. This most recent rule package became effective for the state on March 22, 2006 and was sent to EPA for approval. EPA felt that Iowa actually changed the use designations instead of clarifying them and simply changing the name. If a use designation is changed, then it opens up all of the criteria for that designation for review. EPA sent DNR a list of pollutants and requested that the criteria for these pollutants be addressed before they would approve the use designations.
- The responsibilities of the TAC and the main issue to be discussed were outlined.

### **III. Overview of designated uses – Adam Schnieders**

- See Attached PowerPoint Presentation

### **IV. Overview of Chemical Criteria WER – Connie Dou**

- See Attached PowerPoint Presentation

### **V. Discussion**

- Recalculation Process

EPA clarified that new or revised designation opens criteria for review and explained the rebuttable presumption.

The TAC discussed how it was critical to get this process and the science right so that it can be applied to other criteria changes in the future.

Dusan Palic had some concerns with how the Recalculation Procedure was used. Connie explained how the most sensitive species are handled in the Recalculation Procedure.

EPA stated the importance of food chain sensitive species and that states cannot prove a negative without monitoring data to show that a species is indeed never in the stream.

Dusan Palic stated that if a species is part of the stream ecosystem and therefore is part of the food chain.

EPA stated that Rotifers are not represented in the database used for the Recalculation Procedure.

The TAC discussed the use of surrogate species in the recalculation and that they may result in more or less stringent criteria and why cold water species were used as surrogates.

For Cadmium, the DNR used the Red Shiner and kept Rainbow trout for WW-2, 3. This should be clarified in the work element report.

It was EPA's position that not using criteria recalculations that resulted in criteria more stringent than 304(a) undermines the recalculation process.

DNR does have criteria more stringent than 304(a) for Heptachlor. Rounding and significant figures was discussed.

- Cladoceran

Susan Heathcote brought forward questions on recalculations that are more stringent than 304a; pooled conditions may be conducive to Cladoceran and if in looking at pooled streams – non flowing water may be difference in WW-2, and 3.

EPA indicated that they do not want Iowa DNR to inaccurately portray research on Cladocerans.

It was mentioned that ISU has a database on fish species. The contact is Clay Pierce.

Dusan Palic made overall comments that this is an aquatic ecosystem health issue and that Iowa's report was developed from an engineering perspective at a point in time. The focus should be on the presence of Ceriodaphnia.

John Olson expressed an opinion that soft bodied Cladocerans are destroyed in flowing streams and questioned why EPA was unwilling to why accept the Topeka shiner diet study.

Mike Coffey indicated that the conservatism factors do not or may not be ultimately protective. A direct analysis is needed. Ceriodaphnia may be representative of food web.

Dr. Baumann stated that Ceriodaphnia may represent nothing.

Mike Coffey indicated that an ecological evaluation was needed to determine the effect of removing Ceriodaphnia from the food chain.

- Designated Use Definitions

The TAC discussed that streams may be different in different state regions? Do we have the appropriate level of protection?

EPA and Jay Brady indicated that there was confusion between the WW-1 and WW-2 designations?

Jay suggested that Iowa needs an “Other” category for those limited resource streams.

- Endangered Species Act

Susan Heathcote indicated the need to learn more about and understand the ESA process

- Criteria expressed as Total Recoverable (DNR) or Total Dissolved (EPA)

Connie Dou explained that Iowa has used criteria expressed as Total Recoverable because of how the criteria are implemented through the NPDES permitting process.

- Topeka Shiner

Connie Dou explained the Conservatism Factors that were in place to protect the Topeka Shiner.

The TAC questioned why the factors should apply to all streams instead of just critical habitat.

John Olson indicated that the Topeka Shiner is habitat limited rather than water quality limited.

Mike Coffey agreed with John but also stated that water quality should not be discounted as an important factor. Invertebrates rather than fish are biggest factor in this recalculation. There is a need to make sure food source is protected through recalculations

EPA stated that under the CWA there is a need to make sure food sources are maintained and that Rotifers are not represented in the database.

## **VI. Recap of Issues**

- Criteria recalculated that are more stringent than 304(a)
- Expressing criteria as Total Dissolved or Total Recoverable
- What are the differences between the 1985 and the 2001 Species Deletion Procedure
- What are the fiscal impacts on NPDES facilities
- Does the FAV protect 95% of the tested species
- Are there any criteria below the detection level
- What are the differences between B(WW-1) and B(WW-2)
- Are Ceriodaphnia present in B(WW-2) and B(WW-3) streams
- The TAC would like to see an Recalculation Example
- How will the criteria be implemented?
- Is there toxicity data for Rotifers?

## **VII. To Do:**

- The DNR stated that they will make the presentations and meeting notes available to the TAC. Also, staff would look into providing the research papers on the web unless copyright concerns were a question.